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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,400	11/04/2003	Peter A. Quigley	FPY-048.04	5827
51414 7590 10/15/2007 GOODWIN PROCTER LLP PATENT ADMINISTRATOR EXCHANGE PLACE BOSTON, MA 02109-2881				
EXAMINER				
COLE, ELIZABETH M				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
10/15/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/700,400

Applicant(s)

QUIGLEY ET AL.

Examiner

Elizabeth M. Cole

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-37 is/are allowed.
- 6) ☒ Claim(s) 38-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1794

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/30/07 has been entered.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 38-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomeer et al, U.S. Patent No. 5,828,003 in view of Williams et al, U.S. Patent No. 5,908,049. Thomeer discloses a composite tubing which can be coiled, (i.e., spoolable) which comprises an inner layer which corresponds to the claimed impervious layer, fiber reinforced composite layers wherein at least one of the layers comprises fibers which are wrapped circumferentially around the longitudinal axis of the tubing, and fibers which are formed about the longitudinal axis of the tube by braiding, so that the fibers are directed clockwise, counter clockwise and radially, and fiber which are formed by weaving at a 45 degree angle which would correspond to the claimed helical fibers. See col. 7, lines 12-27, and figure 6a showing woven fiber layer 79 which is at angle of about

45 degrees. The claims do not require that the helical fibers be interwoven with the clockwise or counterclockwise fibers. See figures 6a-6d. The tubing can further comprise conductive wires located within the tubing which are able to communicate at various locations on the tubing. See col. 8, lines 48-52. A sensor can be incorporated into the wall of the tubing. See col. 6, lines 63-65. Thomeer differs from the claimed invention because it does not disclose that the tubing comprises a sensor in the inner wall. Charboneau discloses a lining for pipelines which may include an optical fibers which is in the liner for purposes of monitoring stress or for communication, and which further comprises a capacitance leak detection circuit in the liner. The leak detection circuit is disposed in the inner liner and therefore meets the limitation that the sensor is coupled to an interior surface of the tube. Charboneau teaches that the optical fibers can be connected to a stress detector to monitor the liner when it is installed in a pipeline. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated optical fibers for the purpose of monitoring stresses in the tubular member of Thomeer et al, motivated by the expectation that this would enable pipelines which employed the liners to be monitored for possible problems. Further, it is noted that the person of ordinary skill in the art would have recognized that the prior art teaches the claimed composite tubing and teaches incorporating sensors in the tubing and would have been able to place the sensor in those positions in the tubing where it was desired that data be collected and transmitted by the sensor, since the purpose of a sensor is to sense a particular condition and then transmit this information.

4. Applicant's arguments filed 7/30/07 have been fully considered but they are not persuasive. Applicant argues that neither Thomeer nor Charboneau teach a sensor which is connected for signal communication by way of the energy conductor and coupled to an interior surface conductor. However, Thomeer teaches incorporating conductive elements in the tubing and also teaches that the tubing can comprise a sensor. Thomeer does not teach precisely where the sensor is disposed in the tubing, however, since the purpose of a sensor is to detect a change or condition and then transmit data, the person of ordinary skill in the art would have been able to select the place where the sensor could be placed depending on where it was desired that data be collected and transmitted by the sensor. The sensor would have to be connected to the conductive elements in order for it to work. Further, Charboneau teaches that the leak detection circuit can be disposed in the inner liner which meets the claimed structure. Therefore, the rejection is maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

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/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794

e.m.c